Special 510(k) Premarket Notification

# Summary of Safety and Effectiveness Alumina V40<sup>™</sup> Head

### **Submission Information**

Name and Address of the Sponsor

Of the 510(k) Submission

Howmedica Osteonics Corp

59 Route 17

Allendale, NJ 07401-1677

Contact Person:

Karen Ariemma

Regulatory Affairs Specialist

Date of Summary Preparation:

October 20, 2000

#### **Device Identification:**

Proprietary Name:

Alumina V40<sup>™</sup> Head

Common Name:

Femoral Bearing Head

Classification Name and Reference

Hip Joint, Metal/Ceramic/Polymer, Semi-Constrained, Cemented or Nonporous Uncemented Prosthesis, 21 CFR §888.3353

### **Predicate Device Identification**

The Alumina V40<sup>™</sup> Head is substantially equivalent to the Osteonics C-Taper Heads which were determined substantially equivalent via 510(k)s K971409 and K991952.

## **Device Description**

Alumina V40<sup>™</sup> Heads are ceramic femoral bearing heads that have been designed for assembly, through a taper lock mechanism, to titanium alloy femoral stems with a Howmedica Osteonics' V40<sup>™</sup> trunnion design. The line extension adds V40<sup>™</sup> Alumina Heads: 28mm and 32 mm diameter with –4mm, 0mm and +4mm neck offsets, and 36 mm diameter with –5mm, 0mm and +5 mm neck offsets. The modified heads are identical to the unmodified heads in every aspect with the exception of the starting diameter of the taper angle, which is smaller. The subject device is identical in material to the predicate device.

#### **Intended Use**

The V40<sup>™</sup> Alumina Heads are single-use devices and may be used with any appropriately selected legally marketed Howmedica Osteonics' titanium alloy femoral stem that incorporates a V40<sup>™</sup> trunnion. The V40<sup>™</sup> Alumina Heads are intended for use with any appropriately selected



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Food and Drug Administration 9200 Corporate Boulevard Rockville MD 20850

Ms. Karen Ariemma Regulatory Affairs Specialist Howmedica Osteonics Corp 59 Routh 17 Allendale, New Jersey 07401

Re: K003413

Trade Name: Alumina V40 Head

Regulatory Class: II Product Code: LZO

Dated: November 1, 2000 Received: November 2, 2000

Dear Ms. Karen:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act). You may, therefore, market the device, subject to the general control provisions of the Act. The general control provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (Premarket Approval), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 895. A substantially equivalent determination assumes compliance with the current Good Manufacturing Practice requirement, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic (QS) inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4659. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or at (301) 443-6597, or at its Internet address "http://www.fda.gov/cdrh/dsmamain.html".

Sincerely yours,

Celia M. Witten, Ph.D., M.D.

Director

Division of General, Restorative and

Neurological Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

510(k) Number (if known): <u>K & </u> 41 3.

Device Name: Alumina V40<sup>™</sup> Heads

Indications For Use:

The indications for use of the subject device, in keeping with those of other legally marketed Howmedica Osteonics' ceramic femoral bearing heads are as follows:

For Use as a Total Hip Replacement:

- Painful disabling joint disease of the hip resulting from: degenerative arthritis, rheumatoid arthritis, post-traumatic arthritis or late stage vascular necrosis.
- Revision of previous cup arthroplasty or other procedures
- Clinical management problems where arthrodesis or alternative reconstructive techniques are less likely to achieve satisfactory results.

## For Use as a Bipolar Hip Replacement

- Femoral head/neck fractures or non-unions.
- Asceptic necrosis of the femoral head.
- Osteo-, rheumatoid, and post traumatic arthritis of the hip with minimal acetabular involvement or distortion.

#### Other Considerations:

- Pathological considerations or age considerations which indicate a more conservative acetabular procedure and an avoidance of the use of bone cement in the acetabulum.
- Salvage of failed total hip arthroplasty

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Prescription Use	OR	Over-The-Counter Use
(Per 21 CFR 801.109)	•	(Optional Format 1-2-96) (Division Sign-Off) (Division or Concret Rescorative Devices (510(k) Number K 0034/3